### DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

#### LAKE TROPHIC DATA

### MORPHOMETRIC:

Lake: JERICHO POND	Lake Area (ha):	1.62
Town: LANDAFF	Maximum depth (m):	1.3
County: Grafton	Mean depth (m):	0.4
River Basin: Connecticut	Volume (m³):	7000
Latitude: 44°08'48" N	Relative depth:	0.9
Longitude: 71°50'48" W	Shore configuration:	1.55
Elevation (ft): 1490	Areal water load (m/yr): 3	36.04
Shore length (m): 700	```	83.20
Watershed area (ha): 128	.0 P retention coeff.:	0.41
<pre>% watershed ponded: 0</pre>	.0 Lake type: natural w	w/dam

BIOLOGICAL:	9 September 1993
DOM. PHYTOPLANKTON (% TOTAL) #1	DINOBRYON 40%
#2	
#3	
PHYTOPLANKTON ABUNDANCE (cells/mL)	305
CHLOROPHYLL-A (µg/L)	1.97
DOM. ZOOPLANKTON (% TOTAL) #1	VORTICELLA 55%
#2	DAPHNIA 30%
#3	
ROTIFERS/LITER	6
MICROCRUSTACEA/LITER	12
ZOOPLANKTON ABUNDANCE (#/L)	40
VASCULAR PLANT ABUNDANCE	Common/Abun
SECCHI DISK TRANSPARENCY (m)	1.3 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)	6.7
BACTERIA (E. coli, #/100 ml) #1	7
#2	
#3	

### SUMMER THERMAL STRATIFICATION:

### not stratified

Depth of thermocline (m): None Hypolimnion volume  $(m^3)$ : None Anoxic volume  $(m^3)$ : None

CHEMICAL:	Lake: JERICHO POND Town: LANDAFF		
	9 September 1	993	
DEPTH (m)	1.0		
pH (units)	6.6		
A.N.C. (Alkalinity)	7.8		
NITRATE NITROGEN	< 0.03		
TOTAL KJELDAHL NITROGEN	0.50		
TOTAL PHOSPHORUS	0.015		
CONDUCTIVITY (µmhos/cm)	34.5		
APPARENT COLOR (cpu)	49		
MAGNESIUM	0.59		
CALCIUM	4.0		
SODIUM	1.4		
POTASSIUM	0.45		
CHLORIDE	< 3		
SULFATE	5		
TN : TP	33	V. 32141491-444	
CALCITE SATURATION INDEX	3.2		

All results in mg/L unless indicated otherwise

### TROPHIC CLASSIFICATION: 1993

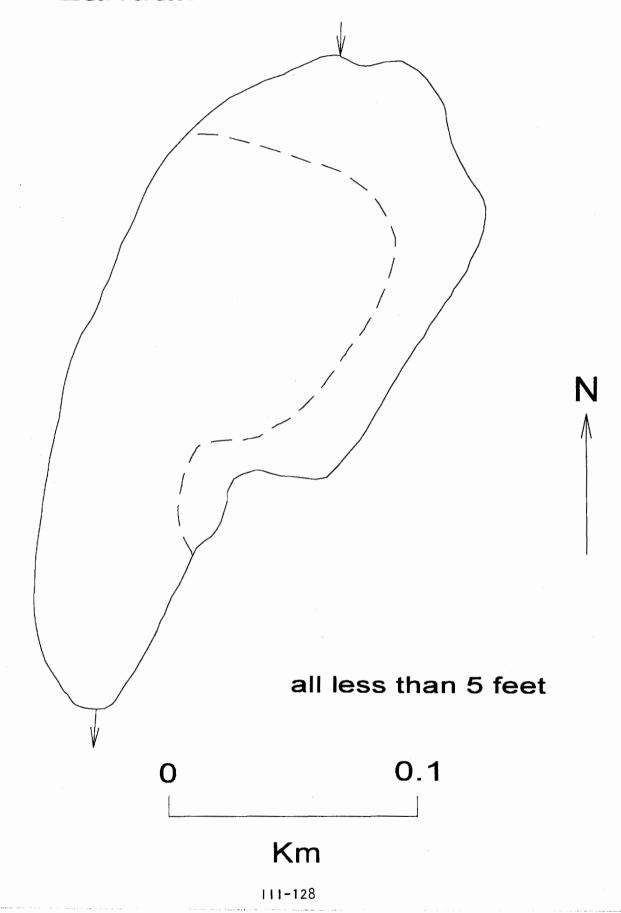
D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	2	4	0	6	Meso.

### COMMENTS:

- 1. This pond was sampled at the request of the NH Fish and Game Department. No winter samples were collected.
- 2. This is a small, shallow, somewhat remote (4-wheel drive road) pond. It was tea-colored but very clear.
- 3. Water level was down two feet; the beaver dam was not being maintained by beavers.
- 4. <u>Cryptomonas</u> (65%) was the dominant wholewater phytoplankton.

# Jericho Pond

### Landaff



#### FIELD DATA SHEET

LAKE: JERICHO POND

DATE: 09/09/93

TOWN: LANDAFF

WEATHER: MILD & CALM

DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	18.1	6.4	67 %
0.5	17.9	6.4	66 %
1.0	17.5	6.7	68 %
•			

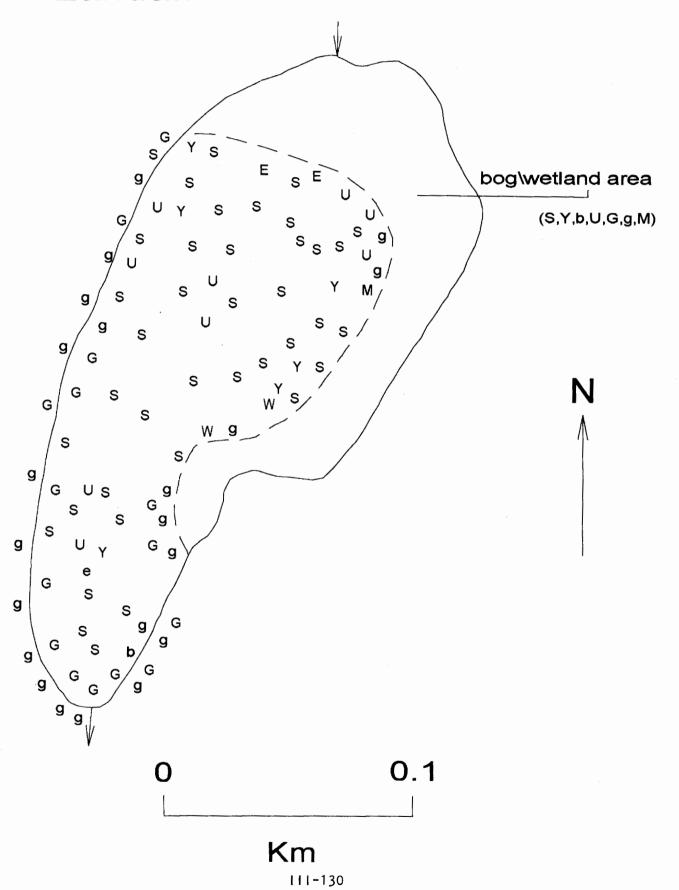
SECCHI DISK (m): 1.3 VOB COMMENTS:
BOTTOM DEPTH (m): 1.3

TIME: 1100

\*Dissolved oxygen values are in mg/L

# Jericho Pond

## Landaff



### AQUATIC PLANT SURVEY

LAK	E: JERICHO POND	TOWN: LANDAFF	DATE: 09/09/93		
Key	PLANT NAME				
veλ	GENERIC	COMMON	ABUNDANCE		
S	Sparganium	Bur reed	Common/Abun		
Y	Nuphar	Yellow water lily	Scat/Common		
b	Scirpus	Bulrush	Sparse		
บ	Utricularia	Bladderwort	Scattered		
G	Gramineae	Grass family	Common		
g	Myrica gale	Sweet gale	Common		
W	Potamogeton	Pondweed	Sparse		
M	Sphagnum	Peat moss	Scattered		
E	Eriocaulon septangulare	Pipewort	Scattered		
A	Peltandra virginica	Arrow arum	Sparse		
е	Eleocharis	Spike rush	Scattered		
			·		

### OVERALL ABUNDANCE: Common/Abun

### **GENERAL OBSERVATIONS:**

- 1. Much of the pond, particularly the northern and eastern shores, was bordered by boggy wetlands; cranberries were present on shore.
- 2. Leeches, salamanders and freshwater sponges were observed.